

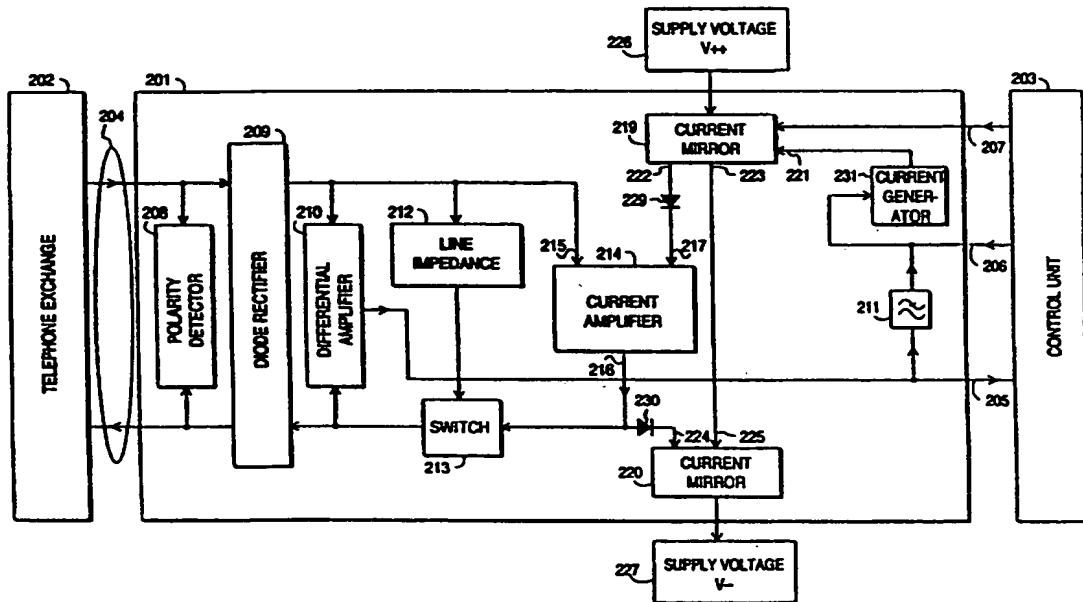


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ :	A2	(11) International Publication Number: WO 99/59327
H04M 19/00		(43) International Publication Date: 18 November 1999 (18.11.99)

(21) International Application Number:	PCT/FI99/00396	(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(22) International Filing Date:	11 May 1999 (11.05.99)	
(30) Priority Data:	981039 11 May 1998 (11.05.98) FI	
(71) Applicant (for all designated States except US):	TELLABS OY [FI/FI]; Sinikallontie 7, FIN-02630 Espoo (FI).	
(72) Inventors; and		
(75) Inventors/Applicants (for US only):	HURME, Harri [FI/FT]; Kaskenkaatajantie 18 C, FIN-02100 Espoo (FI). TAMMINEN, Timo, M. [FI/FI]; Puustellinpolku 8 C 8, FIN-00410 Helsinki (FI). KOSKELA, Jari [FI/FI]; Mäkelänkatu 4d A 6, FIN-00510 Helsinki (FI).	
(74) Agent:	BERGGREN OY AB; P.O. Box 16, FIN-00101 Helsinki (FI).	

(54) Title: CIRCUIT AND METHOD FOR SIMULATION OF A TELEPHONE APPARATUS



(57) Abstract

An electric device (202, 301) for connecting an analogue data transfer device (202) by means of a control unit (203) to a digital transfer system comprises means for connecting to a data transfer device via a twin cable (204). In addition, it comprises a current amplifier arrangement (214, 314, 340) for feeding a certain current to the twin cable, a first current switching device (219) for switching a first control current to the current amplifier arrangement, and a second current switching device (220) for switching a second control current to the current amplifier arrangement. The current switching devices (219, 220) are preferably current mirrors.